ree from dirt and grease, is now to be immersed in it and allowed to stand for about three hours, when it turns perfectly black. It is then lifted out and washed well in soft water and dried in sawdust. After this it is coated with a paste of black lead used for iron stoves, and when dry it is polished with a brush. After this it may receive a thin coat of lac varnish.

## RECENT AMERICAN PATENTS.

The following are some of the most important im provements for which Letters Patent were issued from the United States Patent Office last week. The claim may be found in the official list.
Machine for Printing Designs on Textile Fabrics.-Thi invention consists in imparting to the material to bo printed a lateral vibrating motion, during the operation of printing, in such a manner that the printed surface assumes a watered appearance of different patterns according to the rapidity of the vi brating motion when compared with the rotary mo tion of the printing and pressing rollers; it consists further in the combination with the printing and pressing rollers of a vibrating roller, the lateral mo tion of which can be regulated by means of cranks, pattern or eccentric wheels or any other suitable device, in such a manner that the vibratory motion of the cloth or other material passing over eaid roller to and between the printing rollers can be regulated according to the desired pattern ; it consists, finally, in the arrangement of two hinged angular levers in combination with the let-off roller, from which the fabric to be printed unwinds, and with a weighted roller, in such a manner that the pressure exerted by the weighted roller on the gudgeons of the let-of roller regulates itself according to the varging di ameter of said roller and consequent increase or de crease in the power required for turning the same and that by these means a perfectly unifurm tension of the fabric, during the operation of printing, is effected. Edward Leitenberger, of Reichstadt, Kingdom of Bohemia, is the inventor of this device, but further information about it may be had by address ing the assignee, A. G. Scheller, 370 Bowery, New York.
Coloring Photogra phic Pictures.-The object of this in vention is to enable photographic pictures on albumenized paper to be successfully colored with dry colors. Such pictures, owing to the albumenized paper not being capable of receiving dry colors with out some preparation, and no perfectly suitable pre paration having been heretofore known, are com monly colored with water colors, and this can only be done successfully by skillful artists so as to bear the close inspection to which such pictures are subject. This invention consists in the use of collo dien as a medium for receiving dry colors on such pictures. James F. Bodtker, of Madison, Wis., i the inventor of this improvement.
Direct-acting Engine.-The object of this invention is to arrange the main valve of a steam cylinder in such a manner that the steam is changed and a full head of steam admitted as soon as the piston ar rives at the end of its stroke, and that the engine will pass the dead points without the aid of a balance wheel. The invention consists in the employ$m$ ent, in combination with the ordinary slide valve, of a secondary steam cylinder provided with a slide valve in such a way that by the action of said secondary cylinder the main valve is suddenly thrown from one end of the steam chest to the other, before the piston of the main cylinder arrives at the end of its stroke, and that by these means the steam is changed and a full head of steam admitted to roverse the motion of the piston without the aid of a balance wheel. The motion of the slide valve of the secondary cylinder is governed by the action of cams and by the motion of the secondary cylinder. Louis Winterbauer, of New York City, is the inventor of this engine.
Railroad Car Brake.-The object of this invention is to obtain a car brake by which all the brakes of a series of cars comprising a train may be operated simultaneously by the engineer, and the hrakes made to act with an equal or uniform pressure on all the wheels of the several cars; the invention, at the same time, admitting of a brakesman applying the brakes at either end of a train after the locomotive
is detached. Joseph Hough, of Buckingham, Pa , is the inventor of this improvement.
Revolving Fire-arm.-The principal object of this in vention is to provide for the loading of a revolving fire-arm with metallic cartridges carrying their own priming in hollow flanges projecting circumteren tially around their rear ends without having the revolving cylinder of the arm open at its rear end and hence it consists in the construction of a re volving fire-arm with a number of independent mov able chambers fitted to slide longitudinally within openings in the sides of the revolving cylinder; it also consists in the employment, in combination with such a system of movable chambers, of a stationary piston secured to the frame of the arm for the pur pose of expelling the discharged cartridge shells from he said chambers by a formard movement of the chambers from the cylinder. F, P. Slocum, of Brook lyn, N. Y., is the inventor of this fire-arm.

## secondary governnent fees on patents

We would call the attention of patentees to th annexed amendment of the Patent Laws, enacted March 3, 1863 :-
Every patent shall be dated as of a day not later than ix montha after the time at which it was passed and al nd if the final fee for such patent be not paid within the said six months, the patent shall be withheld, and the in ention therein described shall become pablic property asagainst the applicant therefor: Provided, that in al cases where patents have been allowed previous to the from the date of such passage.
From the above it will be seen that it is incum bent on every patentee to pay the second Government fee within six months after a patent is allowed, or ele it will become public property and the inventor will be deprived of the patent.

The Bibliotheoa Sacra. Published by Warren F. Draper Andover, Mass.
This theological review or April contains nine essays on differen subjects, viz: "The Roman Empire and Cbristianity;" "Buckle History of Civilization;" "The Old School in New England The logy." dc. The Bidiotheca Sacta is very cosmopolitan in an evangoicalsense, and is exceedingly candid in controversy. Ita ensays ar ot dry "marrowloss treatises," like those of the old schoolmen
 opics, but they are usually brilliant, acute and learned.

## Binding the "Scientific American."

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Modelsare required to accompany applications for Patent under the new law, the alame as formeris, except on design patent when tworooddrawing petition, specification and oath, except the Government fee
efw Pamphlests in German.-We have just ibsued a re rised odition of our pamphite of Ironuerkn to Invonlora, containing a digest of the fees requirod under the now Patent Law, da., primied



ISSUED FROM THE UNITED STATES PATENT OFFICE for the weex minding $\triangle$ PRIL $14,1863$.
** Pamphlets containing the Patent Laws and foll par ticulars of the mode of applying for Letters Patent, speci fing size of modelrequired, and much other information useful to inventors, may be had gratis by addressing MUNN \& CO., Publishers of the Scientific American, New York.
38,130.-Metallic Hoop.-J. L. Alber ger, Buffalo, N. Y.: I claima hoop for barrels, casks, tiercea or other vessels made
of staves, having one or more corrugations or creases io th, for the
purpose herein described. purpose herein described
38,140.-Manufacture of Steel.-Charles Attwood, Ton
law Iron-works, Durham county, England. Patent ed in England May 15, 1862
I claim the production or manufacture of steel and iron of a steely
quality, substantially as hereinbefore described and set forth. 38,14 1.-Screw.-J. A. Agres, Hartford, Conn I clajm a screw, A, whih a dovetailed slot, a, as and for the rur
pose set forth. pose set forth.
[This invention consists in the arrangement of a doretalled slotin he head of a screw, in such a manner that the edges of gaid slot af ford a good and frm hold to the screwdriver, and hat said shot is n
38,142.-Provision-cooler.-J. W. Bartlett, New York
City: City
 when arranged substantially as and tor the purposes sp ecitied. 38,143.-Station and Street Indicator for Railroad Cars. Alerander Bertier, Hannibal, Mo. I claim the endless band with a star or pointed wheel attached to
one of its rollers or the shatt thereof, and a projection at the side of


I turther claim the weight, I, appilied th nne or the rollers of the
endless band, when used in combination with the other parts of the band-moving mechanism, for the purpose specified.
[This invention consists in the employment or use of an endiess band having the names of the stations or streets marked upon it and placed within a suitable case inside the car, in combination with bell, a combined bell-bammer and stop, and a band moving mechan.位, whereby the severalstations or streets inl be fodicaled, as ties lireat, to the the the to dire
8,144.-Coloring Photographs.-J. F. Bodtker, Madian, Wis.
photographic pictures on albumenized grounds, substantially as
betein deseribed. erein deseribed
38,145.-Churn Dasher.-A. C. Brown, Sycamore, Ill.: I claim the churn dash, consth
as and for the purposes set forth
38,146.-Carbon Plate for Galvanic Batteries.-C. T. Chester, New York City
fry, a gold or plailinum connection imo element ot a galvanio bat ery a gold or platinum connecion imbedded in the carbon during
the ;rocess of manuracture of the carbon element, substantially as the ,iroces.
38,147.-Cork-drawer.-Chas. Chinnock, Brooklyn, N.Y. I claim the combination of the ratchet cap, a, ibe loose saail-lite
cam, or screw, b, and the corresponding cam or screw c, with the can or screw, b, and the corresponding cam or screw, c , with the
ndependent worm and pillar, d, all operating together for the pur ndependent w
pose set forth.
38,148.-Chuck for Lathes.-J. Christman and Wm. Gilfillan, Syracuse, N. Y.:

 ing constructed, arran
the purpose specifed.
38,149.-Lamp.-G. F. J. Colburn, Newark, N. J. I claim the repervoir, A, having the nrns or proiections, a and b
so formed and combined whit it, as to support and supply with ol so formed and combined with it, as to support and supply with oll
more than one burner simultaneously his specified.
I claim the application of the cap belween the burners for the bject specifie
38,150.-Lamp Chimney.-G. F. J. Colburn,Newark, N. J. I claim the method of connecting a tube with a lamp or gas burns友 eombined with or removed from a glass glube or ot her transparent
device protecting the fame, aubstantially in the man nerand for the device protecting
purpose specifed
38,151.-Mast for Navigable Vessels.-Cowper P. Coles
April 10
I claim the construction of masts for vessels of tubes of steel or
ron, in the manoer and for the purposes substantially as set forth
38,152.-Evaporating Pan for Sugar Juices.-D. M. Cook Mansfield, Ohio
I claim, first, The arrangement of a zig-zag steam coll, constructed
 rests the impurities and aiso keeps the julce comparatively cool'ou
side of the steam coil, subutantialiy as and tor the purposes $d$
Second, The comblation of the steam coil metal bottom, par
sons, wooden ends and woodon bottom, in the mauner and fort purpose described.
Third, The manner of maspending the coll.
38,153.-Cylinder Polisher.-George Cowing, Senecs Falls, N. Y.:
I claim a cylinder polisher composed of the stem, $\mathbf{D}$, apringa, A
38,154.-Steam Radiators.-R. T. Crane, Chicago, Ill. :

 set forth.
Third, ilaim the opening, o, or its equivalent, for the purpose
shown and specified hertin. 38,155.-Hoiding frame for Corkscrews.-H. M. Creamer, - Brooklyn, N. Y.: I claim acirkscrew bnider having the capacity, subsiantially as
described, of being raried in width to suitdifferent-sized botties, sub
stantidill' as specified.

 ebold $r$ er sum
38,156.-Composition for lubricating Wool.-B. A. Earl Philadelphia, Pa
I claim the use of borax water for purposes of lubrication in the
manufacture of wool, as above spectfed.
38,157.-Pump.-E. Elliott, Petaluma, Cal.
I claim the forming of the induction and eduction tubes, $\mathbf{A}$ B, of a
 the tubes, A B, as shown and provided with the piston, F, all ar
ranged toperate as described, the above parts being used with o
withuut the air vessel, C.
This invention relates to a new and improved force pump of tha class which are placed at the bottoms of wells. The object of the invention is to obtain a simpie and efficient pump of the class specibed, and one which will be capable of being advantageously appliod a whamill to be worked or operated thereby.
38,158.-Device for Operating Churns.-Geo. C. Ferris, Sharon, Wis.
1 clam the combination and arrangement of tbe dasher handle, $e$,
the lever, $E$, tbe wheel, $B$, the hole, 0 , and the sypport and gulde, $D$ construcied, and operating substantiaily as and for the purposes set
38,159.-Railroad Chair.-B. F. Gossin, Cincinnati, Ohio I claim, first, The adaptatlon of the base plate, $\mathbf{C}$, side plates, $B$,
bolts, $b^{\prime} b^{\prime}$, and rails, A $A$, for use together ase plate, $C$, is supported and confined against lateral, longitudiaa
nd veritcel movement. In the manner substantially as described. Becond, The combination of the eide plates, $\mathbf{B}$ b $b$, through boits,
$b^{\prime} b_{c} c$, and plate, $\mathbf{C}$, with the rais, $A \boldsymbol{A}$, in the manner substan Thr asd, Tha side plates, B b b, constructed as described, for the pur
pose se forth. pose sei forth. arrangement at the ends of the plate, $C$, of the key
Fourth The ars
bolts, $b^{\prime} b^{\prime}$ in the manner and for the purpose described.
 38,160.-Paper Shirt Collars.-S. S. Gray, Boston, Ma@s. I claim as a new article of manifacture, a paper shirt collar struck
up or pressed from a fint piece into any desirable form, substantially up or pressed froma fiat plece into any des.
as described and for the objects specibed.
38,161 .-(Gang Plow. Jacob Haege, Shiloh, Ill.
I claim, Arat. Then combination and arrangement of the pole, $\boldsymbol{O}$
axle, E, verticalrod, $H^{\prime}$, and draught rod, substantially as shown 0 admit of the lateral adjustment of the draught relatively with gang plow, as setricular manner of attaching the pole, $G$, to the axle,
E, to witi, by par means of the socket, b, fitted on the axie, E, and ar ranged in sinch a manner as to receive the pole, o, and having
screw, e, passing vertically through ti and through' the oblong siots
 desired.
[This invention consists in constructing and arranging certain part pertaining to the gang plow, in such a manner that the draught may cally termed; that is to say, a tendency for the plows to work or move toward or trom the unplowed surface, as may be required, and also to admil of the plows being adjusted nearer together or furthe apart, as may bed or lowered at the will of the driver.]
38.162.-Lamp.-H.W. Hayden, Waterb ry, Conn
 A draght space betw een specified. fhe sald circular wick, $c$, slotted deffector, $h$, and glass chimney, $g$ 38,163.-Reflector for Lamps.-H. W. Hayden, Water I cialim a reflector

38,164.-Tagged Braid for Shoe-strings.-James! Hill,
Providence, R. I. :
 38,165.-Friction Wheel for driving Machinery.-Jonas Hinkley, Norwalk, Ohio



IThis invention cunsists in the employment of a grooved driving wheel in connection with an expanding wheel arranged in such a manner tbat it will press against the sides of the groove in the driving pael, and create sumelen feing so constructed as to be capable of be ing adjugted to regulate the pressure and friction, as may be required.]
38,166.-Railroad Car Brake.-Joseph Hough, Buckingham, Pa.
clamm, first, The manner of winding wit the cbain, $X$, to operate





 the brake mechanism and
purpose herein set forth.
38,167-A Appara\&ug for stirring and mixing Soaps, Colors, acc.-henry Ho
March 7863 :
I claim the form and conotruotion of the vessel, A, for mixing


 Ither salent, with the mixing vessel,
of ither shape, for the purposes set forth
I also claim the application of the ralve, D, in combination with
mixing vetle, $A$, substantially as and for the purposes set forth.
38,168.-Device for inserting the Gores of Shoes.-J. M. I claim amxing the elastic City

38,169.-Hop-cholera Medicine.-Franklin La Rew, Ham-
I clarm the combined use of the above-named ingredients, whe 38,170.-Lamp.-C. B. Lasher, New York (ity radually supplied with oll or fuld from the reservoir through an
 Third, I claim the sorew rod, $k$, and hole, 8 , in combination with
orth
the wick case, g , for regula ti g the supply of oll to sadd case, as se 38,171.-Cultivator.-Alfred Leigh, Clinton Station. N. J. usting levers, C Currowing shares, E, hinge, wedtivator teeth, F, and
withel bar. G. with marker, $\mathbf{H}$, all constructed and operating in the swive bar, G, With marker, H, all, constructed and operating in th
manner and for the purpose herein shown and described. [The invention consists in the arrangement of a frame with four lants and a pole sumclenily elevaled to pass over the growing plants, the hind wheels being on the ends of bent beams, so that by hereby the frame raised or lowered at pleasure for the purpose of regulating the depth of the furrows or throwing the plow-shares out the ground when desired ; the furrowing shares being secured to the cultivating shares being hinged to a crossbar and arranged so e cultivating shares being hinged to a crossbar and arranged hat they can be turned up when not used and turned down whe
they are to be broughtin actiond] 38,172.-Rudder.--Henry Lumley, Chancery Lane, Lon
don. England. Patented in England April 19, 1862 :
 hrough the body, Ai the several parts being constructed and operat
ing substantially in the manner and for the purpose herein shown 38,173.-Skate.-Charles H. Marvin, New York City screw, the poinng and theer part of the skate provided with a rotaling
srate footplece and enter a wut in project above the surface of the
soot beel, while the head o sate frotplece and enter a nut in the boot-beel, while the head o
sald screw is paeed below the foot.ppece and projects beyond the
sides of the runner, as herein shown and described so that by turn Ing the head of sald serew the skate
iemoved from the foot, all as set forth.
This invention relates to an improved mode of attaching the back art of the skate to the heel of the boot or shoe, whereby a very firm will admit of thenarts being attached and detached with the greates facilits.]
38,174.-Stove.-James Morrison, Jr., Troy, N. Y
I claim supplying the oven, f, with a continued current of hot air ith openings, o, in the bottom ther eof, and the hot air chamber,
etween the said
cold air chamber and the fire chamber, a substan
 scribed and set forth. I aliso clalm the combination of the hollow walls or tubes, mm
and the vertical hollow wallis or tubes, z $z$ with the
tially as and for the purpose herein described and set forth. 38,175.-Post-office Stamp.-Marcus P. Norton, Troy I claim, Y.: stamps with indelible ink subs escribed and set forth
Second, I aliso colaim the canceling device, C, with wood, cork, or
simillar material forming the type or bloter, Non with the croseppeee, B, and with the post-marking device, $D$
nubatantially ar berein described and set forth.
38,176.-Combined Lever and Crank Motion.-Elias Nott,
Earl Township, Pa.
 sustan
C $F$ on armor beam, D, forworking the pump and other appliances,
at one and the same time as herein specifled for the purposes men. at one
tioned.
38,177.-Bird Cage.-Charles L. Osborn, Brooklyn, N. Y. s set forth.
second. The combination in a cage of base, A, portable pan, $L$.
wire botiom, $K$, and tubular frates. $B$ and $C$, \&c., or thelr equivawire botom, $K$, and turular frames. B and $C$. Ac., orth
lents, constructed and arranged subsiantially aspecifed.
38,178.-Car Coupling.-James H. Osgood, 'Jr.,"Boston, Mass.:
I claim the link, $C$, provided with the prong, $d$, and hole, $e$, con
structed and operating substantially as usscribed, 38,179.-Thrashing Machine.-Jesse Reed, Marshfield Mass.
 eeding board, D, and
stantially as described.
38,180.-Scroll for Water. Wheels.-Timothy Rose," Cort I claim the movable, $\mathbf{N}$.
I claim the movable gage plece or false side, D , to t he scroll in com
Inallon with one or more trap or stop gates, C , as above described and for the purposes set forth.
38,181.-City Railroad Car.—Jacob_Ruth,; Philadelphia I ciaim, Arst, Shlelds or griarda of appropriate form, arranged ad
 substantlally as ret forth for the purpose specified.
Second, The rocteg frames, $N$ h. hung to the within described nner or independent trame, furnished with guards, h h, and beveled
shields, $M$ M, the whole being arranged and nperating, substantiall) as and for the purpose hereln set forth. arms, $n$ n $n$, and pp, and springs, XX, or their equivalents.
Fourh, The brake levers, $P$, bung to the inner orindependent
frame, jointed to each other, and operating substantially as set forth. 38,182.-Car and Truck Connection.-Josiah J._Sherman, 1 claim, frib, The employment or use of balls, E, or rubbers, $F^{\prime}$,
nterposed between tbe trucks and the car body in suitable boxes, When the sald parts are constructed and combined, in the manner
herein specified so as to permif free motion of he car body laterall in either dire etion, and sfterwards restore it automatically to tis nor
mal pooltion. Second, The eombination of the annular springs, g, with the bear
ings, of 1 j , or any of them, when arranged to operate in the man
ner and for the purposes herein specifed.

the ralls of a rallroad and the wheels of a car truck caused by th ateral movement of the car, to ease the motion of the car, and to of a car in turning or passing over curves.] 38,183.-Combined Bag.holder and Elevator.-George H. mith, Des Moines, Iowa
 IT
all grain peipal object of this invention is to enable the laborer to nient hight from the floor, so as to load them unto his shoulder withoul having to stoop over or require otber help.]
38,184.-Setting for Jewelry.-Samuel. J. Smith, New I claim the setting composed of the two fraines or plates, $A$ B, com
 ngsirips, e e, or their equivalenis, substantialis as berein set forth.
IThis invention consists in an open selting composed of two sepa This invention consists in an open selting composed of two separ
te plates or frames constructed and combined in a novel manner an aving a novelarrangement of clampsifor etting being made with a small expenditure of labor and being ver arong and light, and showing the stones to great advantage, and be ing sullable for brooches, pins, rings, and other articles of jewelry 38,185.-Automatic Grain Scale.-Andrew Steveley, Fond du Lac, Wis.:
I olaim, Girst, The arrangement of the chutea, E and $F$, In the hop-
per substantilly as and for the purposes herein specffed.
Second, The arrangement

 Chep purposes delineated and set forth.
Third, I ciaim the employment for


## 38,186.-Furnace for smelting Ores and for other pur

 poses.-George W. Swett, Troy, N. Y.:.I claim the construction of a furnace combined of the parts de
cribed, or their equivalents, in the manner and for the purpose 38,187.-Hydraulic Lifting Jack.-James" Tangye, Bir
mingham, England. Patented in England, Feb. 27, 1862: England. Patented England, Feb. 2 I claim, first, The arrangement and combination of the parts of hy.
draulic iliting iacks hereinnefore described and illustrated in
i, 2 aigures 2 and 3, of the accompanging drawing.
Second. The arrangement and combination of the parts of the
umps of hydraulic 1 fining jacks hereinbefore described and illus Thed in Figures 1, 2 and 3 , of the accompanying drawing

38,188.-Coal Scuttle.-W. B. Treadwell, Albany, N. Y. I claim the convexo concave shield, B, in combination with the
straps, $a$, and the rods, $e$, operating in ihe manner herein set forth. 8,189.-Lantern.-F. G. Tucker \& A. Craw ford, Albany We claim, $f$ rat, The cells, $s$, 1 , with the shelf, " $m$ in cylinder, $E$
nd the celis, $t$, with the shelf, $n$, in the cylinder, $B$, for the pur Second, The partition, $p$, with the openings, $\overline{\text { S. }}$ : in cylinder, $B$, to
hield the heat from the cap of the lantern.

 Foufth. The springs, e e, as arranged to secure the eylindera, D and
E, to each other in combination with said cylinders and with the E, Llis. shelves and partition aroresatl.
Firth. The combinalion of the whole lantern as represented and se orth, embracing the sald celis, shelves, partitinn, cylliders, orifice and com and springs, as applifed to any or the lamps and burners now
n common use, he whule to be made as represented and for the pur
poses heren set forth.
38,190.- Machinery for makiag Covered Twist and Cord
Mohn Turner, Norwich, Conn., and Isaac E. Palmer


(This invention consists in the arrangement of the yarns or thread cotton or other fibrous material which are to form the hody of cov ered twist and the yarns or threaus of siliz or other fibrous materia which are to form the covering of the same on two serles of bobbin or their equivalents, each of such series carried by one of two separ ate spindles, one of which is hollow, and which are arranged with their axes in line with each other and wbioh rotate either at differen velocithes in the same direction or in different directions, by which metine seral yars or lireads when logether, and the several yarns or threads which farm the covering In a more simple and perfect!manner than by the means heretofore dopted for the purpose.]
38,191.-Grain-dryer.-Jesse B. Wheeler, Bolton, Mass. I claim, first In arranging the walls for forming the dust space, I, lially as beren described, ath tor the purpose set forth.
1 also claim fu cumbination with the hot air chamber, E, perforated ontiom, C, and the sirimg and moving arms traversing over it, the
exhausi fan, $D$, for drawing the heated ur up through the grain and

 I also claim as a sirring and moving mechanism or device, the
arms I also claim as a stirring and moving me
arms hb, hinged made adjastable and mod ed
stantially as herein de ecribed and represent ed
38,192.-Clew Thimble.-William W. Wilcox, Middletown, Conn.
I claim the application to a clew thimble, B, of a guard, a, con-
siructed and operating in the manner and for. ihe purposes substan-
tially as shown and desbribed ally as shown and des bribed.
[This invention consists in the;application to the clew thimble of a guard cast with the same out of one piece, or otherwise secured to proame in a further protection to the rope is needed to save it against infury from that cause.]
38,193.-Direct-acting Engine.-Louis Winterbatuer, New York City
I claim, first, So combining the secondary cyllinder, ${ }^{\prime}$, with the shd
ondary cy linder at the end ot each siroke, the tappet. m, is carried
backto is central postion read to be acedd upn ty the cam, stantially in the manner and for the parpose shown and described.
second, The expauat port, e, of the second scribed when sons aranned, of that main cylinger gubstantially as de.
trough the same port with the main cylinder.
38,194.-Grate.-Charles J. Woolson, Cleveland, Ohio :
I clalm the construotion and srrangement of the drchambera, seo
 38,105.-Loom.-Wm. Breitenstein (assignor to M. Fischel $\underset{\text { I olaim operating and controltin }}{\&}$
I olalm operating and controllity the operation of a divided take-up
by jacquard mechanism, so that che action of the several sections of
the cate-up shall be determined thereby, for the purpose herein set
38,196.-Stereoscopic Instrument.-Ernst G. Chormann
Philadelphia, Pa.:
 combination with the box, A, or its equivalent, the whole being con
gtructed and arranged substantially as and for the purpose herein set

 38,197.-Stereoscopic Instrument.-Ernst G. Chormann, Philadelphia, Pa.:


38,198.-Mode of producing Designs on Textile Fabrics, \&i.-Edward Leitenberger, Reichstadt, Bohemia, as signor to Augustus G. Scheller, New York City :
I claim, first, Imparing to the materlal to be printed a lateral ribr a.
thing molion during the operation of printing substantially as and tor
the purpose specitied. Second, The combination with the printing roller, C, and pressing
roller, Bof the lateraly vibraing roller, I, construce and operat
 of a printing machine con
for the purpose set forth.
38,199.-Coal-oil Lantern.-P. J. Clark (assignor to S. S. I claim the peculiar construction and arrangement, herein shown
and descried, ot the iacket. Hin compination with the lamp, E

[This invention relates to a lantern for burning coal ofl without the ald of a draught chimes, and has for flame of the lamp with a requisite amount of air to support proper the oflinto the lantern in such a manner that the flame will not be extinguished by an up-and-down or, swinging movement of the lan tern.]
38,200.-Printing Machine.-William Bullock (assignor to
himself, Calvin Adams \& G. S. Selden), Pittsburgh himse
Pclaim, first, The feeding of the paper into the printing machine
from a continuou roll or web by meano of a feed roller revolving in
contact with the paper roll, whicb rests aganst it.



 with a portion only of is wright thereon, in order that the angle o
inclination may be gradually increased by the diminution in size o
the roll of paper asitis unwour froin the goon, nnd thus, althoug its weigh fs cuniliualily decreasing, the relailve degree of pres sur



 sheetsof paper, on the feed roller, and thertby causing it to carry the
sheats of pper directly to the first imptession cylinder, substantiall
as descrited.





 has passed between the culting cylinders, shet of sumelent lengt
Ninth, The employment of a yieldigg sheath, consisting of tw
strips, placed one on each side of a serrated cutter, for
 cutung cylinder, while the cutier is severing a sheet of paper frum the
web; and alto tor the purpose of presing the loose ends of the web
or uncut sheet as th passes between the cuthing cylinder immediacely


 from the weob by the cutter, without eing seized by the prippers o the machine, thus preventing the clogaring of the machine, and re
moving riruitfol source of annoyance and delay in the operation, and
damage on the machine damage eo the machince.
Eleventh, Tranaferring
white, immedianely fromg the she first of of paper, after it is is printed in
by means of the gripers placed on the second impressinn cylinders, which ieze the sheet of paper.iust as the grippers on the first im other mechanital devieses, not contuined in the of tapes, cylindera or
for the purbose substantially as described. Twellth, The use of a scrap blanket or apron interponsed between
the culting apparatasind the lype cylinder and inking apparatus, to reventany dust urs craps of pa per from fulliog on the type or inking Thirteenth, The dellivering apparatus, consisting of ahort fly-rods
 a a roller tor receive the stroke of the ey-ruds and the pressure of the
 Fhets is eff ected.
Fourteent, The use of a dellvering table for the reception of the
prited gheets, beneath and in the rear of the dellivering apparatus
which table remins gtationary during the deltiery of the printed
 when it moves back again, and so on, alternating from side to efide,
for the purpose of counting and separating the she for the purpose of counting and separating the sheets into files of any
required number; substantially in the manner hereinbefore de-
seribed. Fiffeenth, Communioating an alternating latural movement to the
small ink-distributing roilers, on the face of the large ink-distributing cylinder. by giving a simultaneous reciprocating motito on to one end
of their bearings, for the purpose of securing a more perfect and
untion of their bearings, for the purp
uniform distribution of the ink.
38,201.-Manufacture of Gun Barrels.-R. A. Douglas,
Orange, N. J., assignor to Edward Robinson, New Orange, $N$
York City
I claim the method, herein described, of making gun barrels, by
drawing the same froma cylinder of mallea bleiron previousig drliled
substantially as herein set drawing the same froma cylind
substantially as herein set torth.
38,202.-Bedstead.-David Manuel (assignor to himself and John M. Kelly), Lancaster, Pa. :
I claiman first, The conically-colled spring, $\mathbf{D}$, for the support of the


38,203.-Strike for Door Latches.-James E. Terry, Philadelphia, Pa., assignor to The Russel \& Erwin Manufacturing Company, New York City I claim a sirike provided wha cwo latoh opentagh, $b$ b, side by side
an inclined projection, $f$ and a central partition $p$ ate, $c$ all arraused substannially as and for the purpose hereln set forth.
IThe object of this invention is to obtain a strike for door lock which will be capable of being applied, without being laverted or reversed in position, to the frame of elther a right or lef.hand door.
The invention is designed to be used with what is generally known as carpenter's lock, or that which has a latei or rising and falling bolt.]
38,204.-Revolving Fire-arm.-Frank P. Slocum (assignor to Samuel B. Slocum), Brooklyn, N. Y.: Onithis. 'longitudinally movable chambers, ige in the sides of the cylinder of sufficient size to permit the later
isertinn of metalic cartridges, without removing the chambers en
irely from the cglinder. Second, The estationary piston, applited in combination with the re
volving cyllinder and its independenily movable chambers, substan illy 88 and for the purpose hertin described
38,205.-Shade Rack.-William Webster, Morrisania, $N$
Y., assignor to Charles Goodyear, Jun., New York $\underset{\text { Clity }}{\text { City }}$
claik, irst. The employment and use of an elastic or flexible rolle
racks, Second. The empmoymentin and use of an anjusial
substanully ss herein set forth and described.
38,206.-Defensive Armor for Ships and other Batteries.I claim the enopiogmentor wood, or fise, eqpilialent, when used it
he menner and for the purpose substanlually as described.

1,451.-Cartridge Box.-A Augustus A. Bennett, Cincinnati,
Ohio. Patented Jan. 27, 1863 :
 lally as derched
1,452.-Wood-saw Frames.-William H. Livingston, New York City. Patented Sept. 18, 1860 :
tween the cross.piece and the e d piece of said frame, in the manne nd for the purposes substantially as spectiled.
Second, The combination of the brace rod, , and metai plate, $\mathbf{D}$ arrapged or applied to the saw frame, esubstandally as aud for th
purpose set forth
1,453.-Manufacture of Metalic Zino.-Alfred Monnier Philadelphia, Pa. Patented May 18, 1858
I claim the process of obtaining metallic zinc by the combination
of the two metallurgicoperations substantially as herein specifed. [This improvement consists in obtaining metallic zinc by a combla on of two metaliurglo operations, riz: first, separating the oxides of nace a degree of heat such as would arge portion of it , by volatilization, from the gangue or other metais with lime in the ore, or by treating the ore with heat in cone gangue and other metals from the oxide of zinc, and, second, treating the xide of zinc, so obtained, by heat and carbon in a sultable retort o mufle and thereby obtaining therefrom metallic zinc.
1,454.-Skate.-Willis L. Gregory and G. Landon. Jun.
of Amsterdam, N. Y, assignees of said Willis L I claim, frst, a detached washer or socketed plate which has a ver
tical and a longitudinal channel formed $n$ it, the two channels inter secting one annuther, the sald washer plate answering as an aurillar lo a skate.ruuner fastening, i. e., a detached screw, substantially
and for he purpose set forth
Becond, Interposing between the wooden stock and the metal run
 tock, gives sidee Third, The combination of the longitudinally-slotted and vertically

 washer or socketed plate, substantially as and for the purpose se
forth
Fith
Fitith A detachable screw as a part of a skate runner fustening,
With two sid es of its head made parallel and fush whith the sides of the
runner below the washer or socketed place, in the manner herein de



 or washers andthe nut Ur other equiraieut fastening or fasteninger
as a means of uniting the stock and runner of a kkate, subslantioly
as desclibed.
1,476.-Stove Plate.—James L. Collins, Chicago, Ill.
Tool for attaching Tubes to Boilers--Thomas Prosser I claim the combinail. Patented April 17



tion of the mortise gulde ring itself, which may be placed inside the
tube, if required.
Yellow-metal Nail or Spike.-Samuel Crocker, Taanton
Mass. Patented April 17, 1849. Re-issued August Jst, 1854; again re-issued February 24, 1863:




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## 4ide

A. A., of N. Y.-No dependance for accuracy can be placed upon the common reports which have been published respecting the diffculties of cutting a canal at Vleksburgh. It would inerefore be out of place for
H. 8., of Pa.-There is no formula by which an inventor can regulate the sale of rights under his patent so as to secure equa on this polnt. We think as a general rule that purchasers get the est of the bargsin.
. A. H., of N. Y.-If Mr. Miller's patent was granted in 1855 it will not expire until 1869. Patents issued in 1855 weregranted
E. M., of Mo.-Your method of bleaching wax, so far as we know, is new and patentable. There are no establishments in this Vicinity, with which we are
special part of the business.
T. H. M., of Pa.-Alcohol is a solvent of castor oil and with it forms a clearsolution, but with olive oll it forms a milky so sorme a trlcopherous for the bair.
S. N.. of Ill.-A correspondent whose letter is published on page 182, Vol. VI. (new series) of the Scientific american calestial the nitro-mariate of platinum is employed to form a
A. B., of Mass.-Any good treatise on photography will give you information respecting the strength of solutions for de-
S. C. C., Jr., of Mass. and J. A. M., of Pa.-Your commuS. B. L., of R. I.-Corliss \& Co., of Providence, R. I., wil nodoubt construct an air whistlefor you, of the size you desire, to be ated with an air pump.
W. H. F., of Iowa.-We recommend gou to get a good millwright to select the engineandboiler fory our grist mill. Any englne of the best quallty, if a suflicient sum is pald for them.
H. W., of Pa .-The cement for stopping sand-holes in iron casungs ls made by mixing one part of flowers of sulphur and two tarnings. Sufficient water is used to make this compound into a thick paste; it is used as soon it is made and the holes are plugged ught with it. This cement ultimately becomes as hard as

## the metal itself.

T. V., of N. Y.-Gumboge (commonly called gamboge) la a yellow gum cold by all dealers in artists' materiale. It is emE ploged as a wator olorin painting, and for coloring lacquers or
raplinke ande of abelise.

## Money Received

At the Scientific American Office, on acconnt of Paten Office basinees, from Wednesday, $\Delta$ pril 15, to Wednesday, 1 pril 22 1863:-

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 D. R., of R. I., \$16; G. B. F., of III., \$30; T. W., of Mass., \$17; W M., of N. Y., 825 .

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them is to be fnal and conclusive
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pound, for the fnighed cannon, dellivered at the place of shipment
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deemed to high or if, for any cause, it is not thought or the publle
 182

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IQUID GUTTA-PERCHA CEMENT FOR COATING


R EADY ROOFING.-THIS ARTICLE IS MADE OF



STEAM AND. WATER GAGES, GLASS TUBES, PAT-


WOOD-WORKING MACHINERY, DESIGNED FOR











 rails and chairs for rail ways: Plate XIII; Rule and Practical Data,
Strength of material, Resistance to compresslon or crushing force;















 of water through rectangular orifices of narrow edges, Calculation of
thed Ischargo f wher though oversho outlets, To delermine the
width of an or ershot nuthet, To determine the depth of the outlet,

 Thic COTTING $\triangle$ ND DBAFing or Masonar: Plate XXXIV- Rules ond




 Steam pipes and pasages, Alr.pump and condenser, Cold.water and
feed-pumps, High-pressure expansive engines, Medium pressure con


 Lion of the mill, Representation of the mill in perspective, Notes o
recent impovements in flour mills, Schiele's mill, Mullinns ring
millstone." Barnett's millstone, Hastle's arrangement for driving millstone," Barnett's millstone, Hastie's arrangement for driving
mills, Curlis's impovements in millstones, Ruterand Practi Dota,
Work performed by varlous machnes, Flour mils, Saw mills, Veneer-




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